TOPOGRAPHIC MAP VIEWER FOR GEORGIA

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Abstract. The U.S. Geological Survey (USGS), in cooperation with Georgia Department of Natural Resources, Environmental Protection Division, has developed a topographic map viewer (TopoViewer) and database built on Environmental Systems Research Inc., MapObject® technologies. The TopoViewer software and data are contained on a single DVD–ROM. TopoViewer software is a freely distributed geographic information system type graphic user interface, providing a viewer, a search engine and printing options to the user (Fig. 1). The spatial data on the DVD–ROM includes all 1,017 USGS topographic maps (1:24,000-scale) for the State of Georgia, the Georgia Department of Transportation state highway map, as well as other vector datasets—including: roads, streams, county boundaries, interstate highways, and quadrangle boundaries.
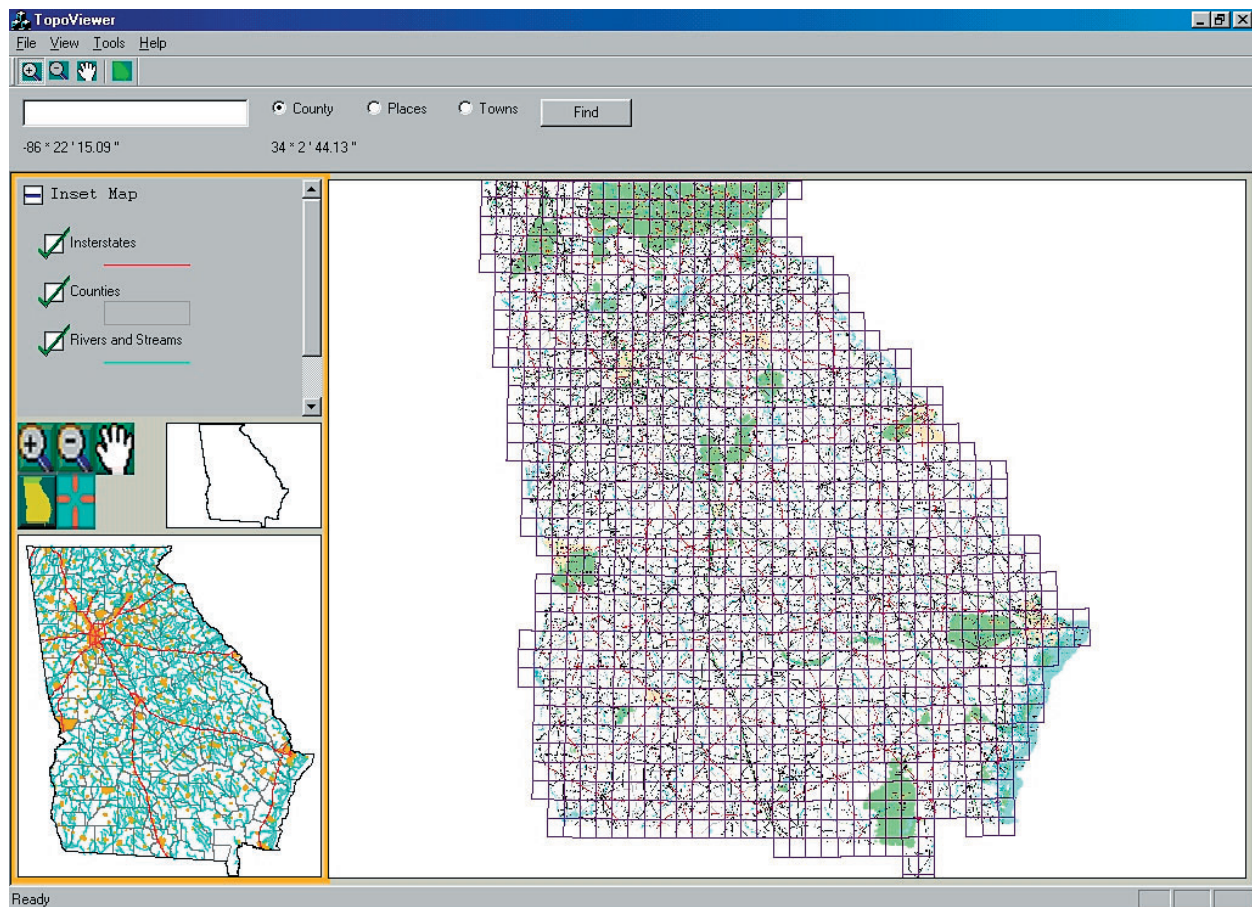
Figure 1. TopoViewer geographic information system type graphic user interface.

The user may search by town, county, geographic name (this is based on the USGS Geographic Name Information System, and allows users to search for features such as a stream name), or by simply clicking in either the index map window (lower left), or the main window (right). Other functions include zoom-in or zoom-out and seamless panning across the entire state. Figure 2 depicts a search for the name "Stone Mountain" and the display of the selected feature in the main window. Users also may simply click in the index map window and view the selected topographic image in the main window (Fig. 3).

The TopoViewer software and data provide users considerable advantages over traditional paper maps in handling and transporting all of Georgia's 1:24,000-scale topographic maps, in viewing map information seamlessly across multiple map sheets, and in printing any view in the main window.

The Georgia Geologic Survey's Maps and Publications Office (19 Martin Luther King, Jr. Drive, Room 400, Atlanta, Georgia 30334) will distribute the TopoViewer software and data for Georgia on DVD–ROM (scheduled for publication by late Summer 2003).

Future enhancements for the TopoViewer product include the addition of Landsat Imagery and 1:12,000-Scale Color Infrared, Digital Orthophoto Quarter Quadrangles. A county-based, DVD–ROM viewer is being developed and populated in cooperation with the Georgia Emergency Management Agency.
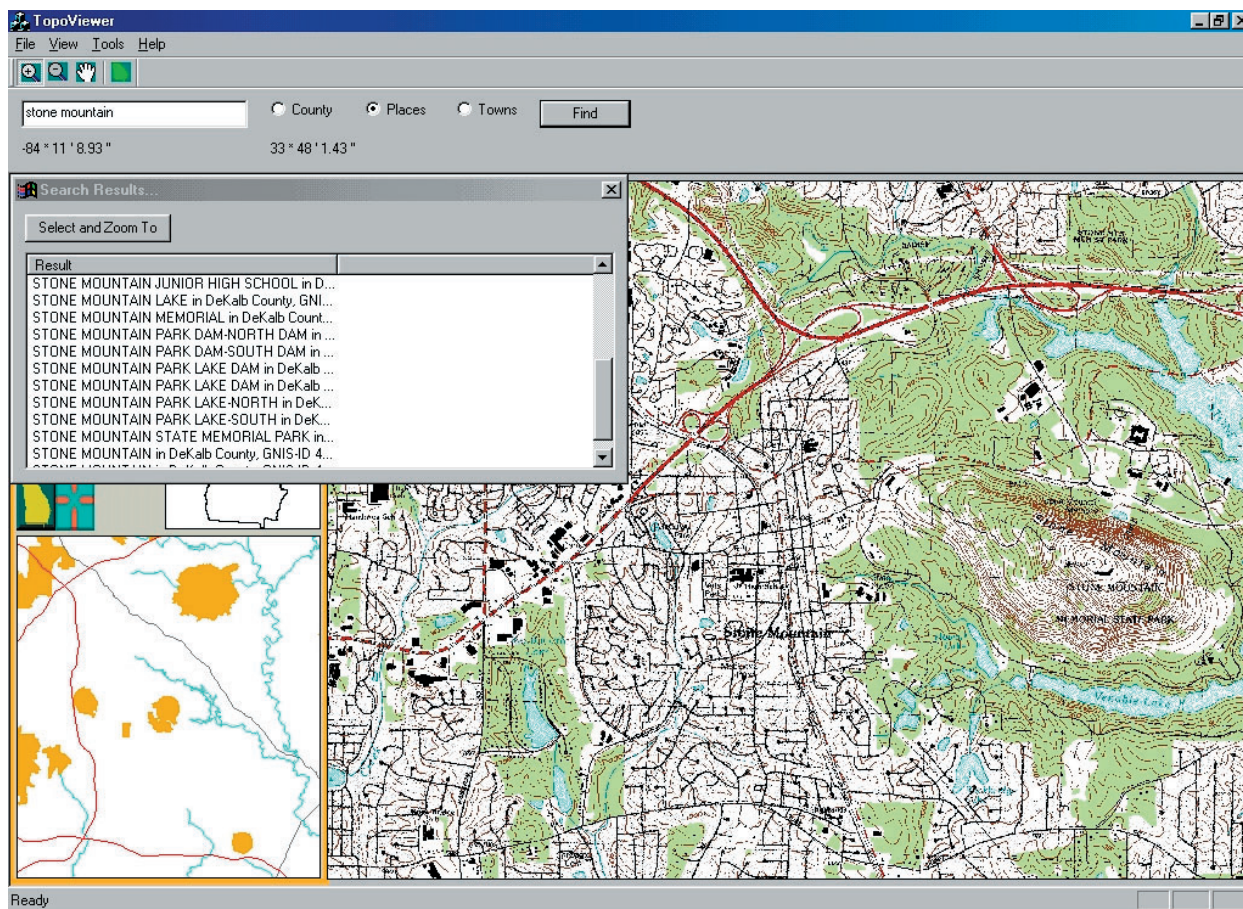

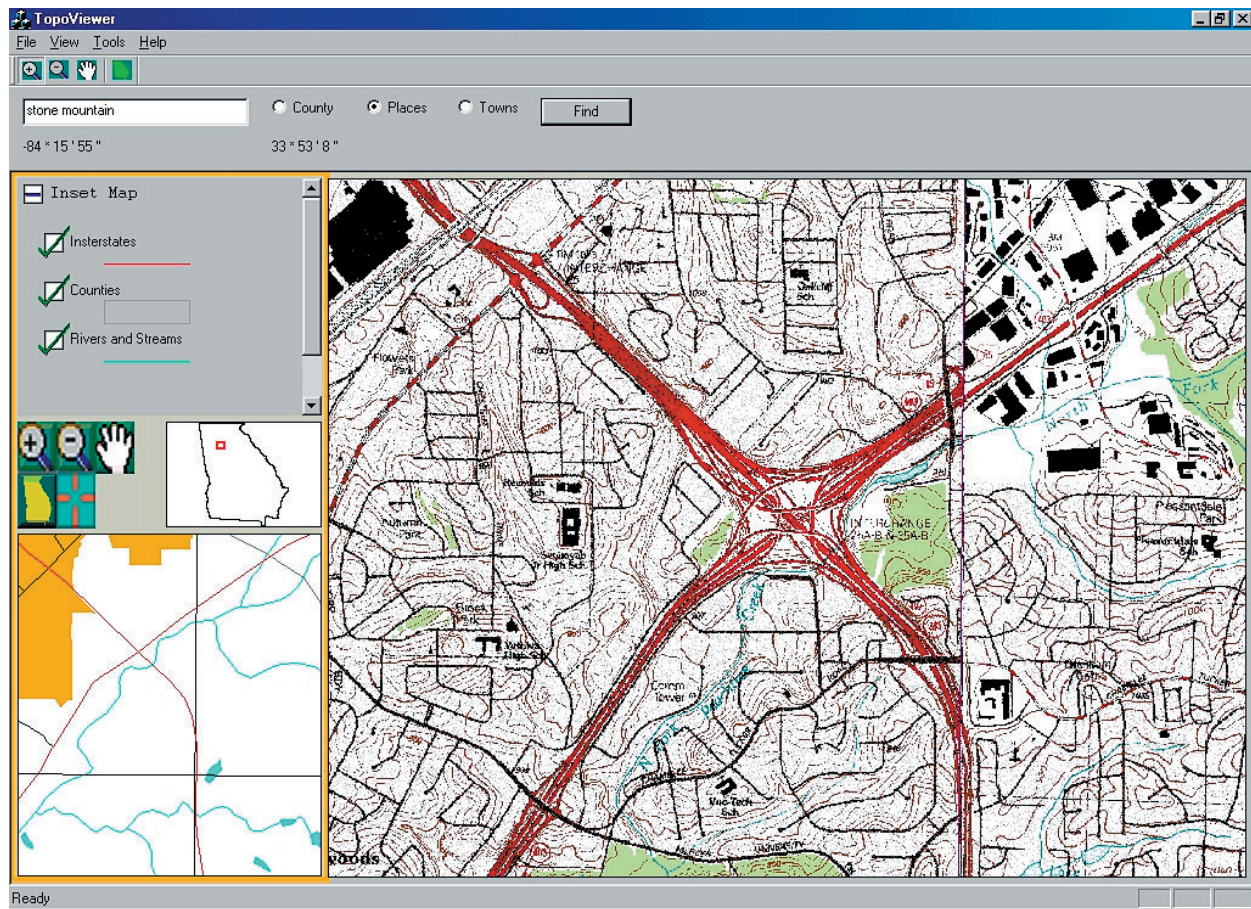Figure 2. Stone Mountain Memorial Park in DeKalb County, Georgia.

Figure 3. Example of selecting topographic view using the index window.